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10/697,983	10/31/2003	Hiroshi Tanioka	03500.013997.1	8959

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EXAMINER	
RUTLEDGE, AMELIA L	
ART UNIT	PAPER NUMBER
2176	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/697,983	TANIOKA, HIROSHI	
	Examiner	Art Unit	
	AMELIA RUTLEDGE	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,7-9, 26 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4, 7-9, 26, and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed 03/28/2008; RCE, filed 03/28/2008.

2. Claims 1, 4, 7-9, 26, and 27 are pending in the case. Claims 1, 8, and 9 are independent claims.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/28/2008 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4, 7-9, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaza, U.S. Patent No. 5,566,252 issued October 1996, in view

of McQueen, et al. ("McQueen"), U.S. Patent No. 5,586,242, issued December 1996, and further in view of Davies, U.S. Patent No. 6,088,478, issued July 2000, filed February 1998.

Regarding independent claim 1, Miyaza discloses an image processing apparatus comprising: a reading unit constructed to read an image in an original (col. 7, l. 43-col. 8, l. 4); and a character recognizing unit constructed to recognize a character in the image read by said reading unit (col. 11, l. 7-35). Miyaza teaches a storing unit constructed to store a character font; a readout unit constructed to read the character font from said storing unit in response to a result of recognition obtained by said character recognizing unit (col. 46, l. 47-65; col. 51, l. 58-col. 52, l. 65).

While Miyaza teaches recognizing a character, Miyaza does not explicitly teach the step to output a character code as a result of recognition. However, McQueen teaches recognizing and generating a matching font on the fly using an output character code as a result of recognition (col. 8, l. 17-59). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the font size matching and recognition, and font selection unit, disclosed by McQueen, to the control panel and magnifying image processor disclosed by Miyaza, since Miyaza had functionality to enable user selection of document presentation features, and so that Miyaza would have the benefit of providing assistance for the user in selecting the correct font for a particular job from among those fonts available for use (McQueen, col. 2, l. 4-10).

Miyaza teaches a detecting unit constructed to detect first character size concerning the character in the image read by said reading unit; a setting unit

constructed to set a magnification ratio based on an instruction by an operator; a determining unit constructed to determine second character size based on the first character size and the magnification ratio (col. 71, l. 25-col. 73, l. 38; col. 44, l. 43-col. 46, l. 4; col. 65, l. 9-col. 67, l. 30), since Miyaza teaches a copy machine with input processor to detect character size and set magnification, and to determine second character size based on a magnification threshold value which is a ratio (col. 71, l. 25-col. 73, l. 38).

While Miyaza teaches a control panel to facilitate user selection of modes (col. 8, l. 57-col. 9, l. 6), which suggests font selection, Miyaza does not explicitly teach a selecting unit constructed to select a type of the character font stored in said storing unit based on an instruction by an operator; however, McQueen teaches enabling a user to select from a plurality of fonts and font styles (col. 2, l. 31-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the font size matching and recognition, and font selection unit, disclosed by McQueen, to the control panel and magnifying image processor disclosed by Miyaza, since Miyaza had functionality to enable user selection of document presentation features, and so that Miyaza would have the benefit of providing assistance for the user in selecting the correct font for a particular job from among those fonts available for use (McQueen, col. 2, l. 4-10).

Miyaza teaches *a generating unit constructed to generate a reproduced image, which includes characters having the second character size, based on the character font, the type of which is selected by said selecting unit, and ...a reproduction width of*

an image to be reproduced, said reproduction width being fit to a width of the image read by said reading unit multiplied by the magnification ratio, (col. 71, l. 25-col. 74, l. 65), since Miyaza teaches measuring the line width of a character to be within a predetermined range, when a character size is magnified, as well as the space around characters, i.e., character gaps (col. 69, l. 7-42; Fig. 35; Fig. 48, 51, 52 col. 71, l. 25-col. 73, l. 38).

Miyaza in view of McQueen does not explicitly teach *wherein said generating unit generates the reproduced image by selectively allocating a plurality of character gap widths between adjacent characters, in accordance with a width of the characters having the second character size*, however, Davies teaches a method of distinguishing two character sizes, i.e., bold and non-bold characters, and allocating a plurality of character gap widths between adjacent characters (col. 3, l. 9-42). Davies teaches determining character width and dividing by total number of pixels in the run length, i.e., total length by the number of pixels needed to represent a symbol, and selectively allocating character gap widths between bold and non-bold characters (col. 5, l. 36-col. 6, l. 48). Davies teaches that the method is used for document compression in order to compensate for non-zero row offsets (col. 1, l. 10-col. 2, l. 50), and Davies teaches that the method of distinguishing bold and non-bold characters reduces the total number of pixels of the compressed image (col. 2, l. 53-col. 3, l. 42; claims 5-15).

Miyaza, McQueen, and Davies are analogous art, since all three are directed toward managing document presentation. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the font size matching and

recognition, and font selection unit, disclosed by McQueen, to the control panel and magnifying image processor disclosed by Miyaza, and the methods of character recognition and of distinguishing bold and non-bold characters disclosed by Davies, so that Miyaza would have the benefit of providing assistance for the user in selecting the correct font for a particular job from among those fonts available for use (McQueen, col. 2, l. 4-10), along with the more efficient method of distinguishing character widths disclosed by Davies (col. 3, l. 7-12), resulting in a more efficient and user-friendly method of text image compression.

Regarding dependent claim 4, Miyaza teaches determining the second character size as a maximum size by which all characters in the original can be reproduced as reproduced images (Fig. 48, 51, 52), since Miyaza teaches a maximum size threshold value which is determined for each character, or alternatively for areas of a document.

Regarding dependent claim 7, Miyaza teaches that the generating unit reproduces characters by combining a plurality of kinds of character gaps when a number of pixels of a character gap calculated in accordance with the magnification information is not an integer (col. 46, l. 8-35; col. 56, l. 20-col. 57, l. 5; col. 71, l. 25-col. 74, l. 65), since Miyaza teaches calculation of a defacement rate, which is a calculation of the number of pixels in a character gap, i.e., space surrounding a character, and thus implies combining a plurality of kinds of character gaps when a number of pixels of a character gap calculated in accordance with the magnification ratio is not an integer.

Regarding independent claim 8, claim 8 is directed to the methods implemented by the image processing apparatus of independent claim 1, and is rejected along the same rationale.

Regarding independent claim 9, Miyaza teaches a recording medium readable by a computer characterized by storing a program therein, said program using the computer to execute the processing comprising the steps of: reading an image in an original (col. 7, l. 43-col. 8, l. 4); detecting first character size information concerning a character in the image; recognizing a character in the image unit (col. 46, l. 47-65; col. 51, l. 58-col. 52, l. 65); reading a character font from a storing means in response to a result of character recognition (col. 11, l. 7-35).

While Miyaza teaches recognizing a character, Miyaza does not explicitly teach the step to output a character code as a result of recognition. However, McQueen teaches recognizing and generating a matching font on the fly using an output character code as a result of recognition (col. 8, l. 17-59). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the font size matching and recognition, and font selection unit, disclosed by McQueen, to the control panel and magnifying image processor disclosed by Miyaza, since Miyaza had functionality to enable user selection of document presentation features, and so that Miyaza would have the benefit of providing assistance for the user in selecting the correct font for a particular job from among those fonts available for use (McQueen, col. 2, l. 4-10).

Miyaza teaches setting a magnification ratio based on an instruction by an operator; determining second character size based on the first character size and the

magnification information (col. 44, l. 43-col. 46, l. 4; col. 65, l. 9-col. 67, l. 30), since Miyaza teaches a copy machine with input processor to detect character size and set magnification, and to determine second character size based on a magnification threshold value, a ratio (col. 71, l. 25-col. 74, l. 65).

While Miyaza teaches a control panel to facilitate user selection of modes (col. 8, l. 57-col. 9, l. 6), which suggests font selection, Miyaza does not explicitly teach selecting a type of the character font stored in said storing unit based on an instruction by an operator; however, McQueen teaches enabling a user to select from a plurality of fonts and font styles (col. 2, l. 31-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the font size matching and recognition, and font selection unit, disclosed by McQueen, to the control panel and magnifying image processor disclosed by Miyaza, since Miyaza had functionality to enable user selection of document presentation features, and so that Miyaza would have the benefit of providing assistance for the user in selecting the correct font for a particular job from among those fonts available for use (McQueen, col. 2, l. 4-10).

Miyaza teaches *generating a reproduced image, which includes characters having the second character size, based on the character font, the type of which is selected by said selecting step, and ...a reproduction width of an image to be reproduced, said reproduction width being fit to a width of the image read in said reading step multiplied by the magnification ratio,* (col. 71, l. 25-col. 74, l. 65), since Miyaza teaches measuring the line width of a character to be within a predetermined

range, when a character size is magnified, as well as the space around characters, i.e., character gaps (col. 69, l. 7-42; Fig. 35; Fig. 48, 51, 52 col. 71, l. 25-col. 73, l. 38).

Miyaza in view of McQueen does not explicitly teach *wherein said generating step generates the reproduced image by selectively allocating a plurality of character gap widths between adjacent characters, in accordance with a width of the characters having the second character size*, however, Davies teaches a method of distinguishing two character sizes, i.e., bold and non-bold characters, and allocating a plurality of character gap widths between adjacent characters (col. 3, l. 9-42). Davies teaches determining character width and dividing by total number of pixels in the run length, i.e., total length by the number of pixels needed to represent a symbol, and selectively allocating character gap widths between bold and non-bold characters (col. 5, l. 36-col. 6, l. 48). Davies teaches that the method is used for document compression in order to compensate for non-zero row offsets (col. 1, l. 10-col. 2, l. 50), and Davies teaches that the method of distinguishing bold and non-bold characters reduces the total number of pixels of the compressed image (col. 2, l. 53-col. 3, l. 42; claims 5-15).

Miyaza, McQueen, and Davies are analogous art, since all three are directed toward managing document presentation. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the font size matching and recognition, and font selection unit, disclosed by McQueen, to the control panel and magnifying image processor disclosed by Miyaza, and the methods of character recognition and of distinguishing bold and non-bold characters disclosed by Davies, so that Miyaza would have the benefit of providing assistance for the user in selecting the

correct font for a particular job from among those fonts available for use (McQueen, col. 2, l. 4-10), along with the more efficient method of distinguishing character widths disclosed by Davies (col. 3, l. 7-12), resulting in a more efficient and user-friendly method of text image compression.

Regarding dependent claim 26, Miyaza teaches that said method enables to output the reproduced image in an image processing apparatus which can form on a sheet an image based on data input from at least any of a plurality of data generation sources including an original reading unit and an external apparatus, since Miyaza teaches a digital copying machine as an image processor (col. 7, l. 43-col. 8, l. 55).

Regarding dependent claim 27, while Miyaza does not explicitly teach a personal computer interface and a network, McQueen teaches that said method enables to output the reproduced image in an image processing apparatus which can transmit data to an external apparatus through at least any of a plurality of data transmission media including a personal computer interface and a network, since McQueen teaches use with the Windows TM operating system, which was network enabled (col. 3, l. 46-col. 4, l. 4).

Miyaza, McQueen, and Davies are analogous art, since all three are directed toward managing document presentation. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the font size matching and recognition, and font selection unit, disclosed by McQueen, to the control panel and magnifying image processor disclosed by Miyaza, and the methods of character recognition and of distinguishing bold and non-bold characters disclosed by Davies, so

that Miyaza would have the benefit of providing assistance for the user in selecting the correct font for a particular job from among those fonts available for use (McQueen, col. 2, l. 4-10), along with the more efficient method of distinguishing character widths disclosed by Davies (col. 3, l. 7-12), resulting in a more efficient and user-friendly method of text image compression.

Response to Arguments

Applicant's arguments with respect to claims 1, 8, and 9 have been considered but are moot in view of the new ground(s) of rejection, the Davies patent, which is being relied upon to teach the newly claimed limitations of claims 1, 8, and 9.

Miyaza in view of McQueen does not explicitly teach *wherein said generating step generates the reproduced image by selectively allocating a plurality of character gap widths between adjacent characters, in accordance with a width of the characters having the second character size*, however, Davies teaches a method of distinguishing two character sizes, i.e., bold and non-bold characters, and allocating a plurality of character gap widths between adjacent characters (col. 3, l. 9-42). Davies teaches determining character width and dividing by total number of pixels in the run length, i.e., total length by the number of pixels needed to represent a symbol, and selectively allocating character gap widths between bold and non-bold characters (col. 5, l. 36-col. 6, l. 48). Davies teaches that the method is used for document compression in order to compensate for non-zero row offsets (col. 1, l. 10-col. 2, l. 50), and Davies teaches that

the method of distinguishing bold and non-bold characters reduces the total number of pixels of the compressed image (col. 2, l. 53-col. 3, l. 42; claims 5-15).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMELIA RUTLEDGE whose telephone number is (571)272-7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Amelia Rutledge/
Examiner, Art Unit 2176